9-1-1 Service through MLTS/PBX Systems

Background

In an emergency, dialing 911 is usually the most effective way to summon help. 9-1-1 is more than just an easy to remember number. When you dial 911, the system is designed to automatically connect your call to the right public safety agency serving your location and provide the 911 call taker with a display of your telephone number and your address location. Help can be dispatched to your location even if you cannot speak.

But some telephones located at workplaces, schools or temporary residences won't work well with the 911 location system. These telephones are connected to multi-line telephone systems (MLTS) or Private Branch Exchange (PBX) systems. MLTS or PBX phones may not be located precisely by the 911 system. This problem has resulted in delays in emergency response that have real life consequences. PBX systems are commonly found in most government complexes, businesses, hotels, schools, college campuses, and hospitals. PBX systems are also used in some apartment buildings and other multi-unit, residential complexes.

If you have to call 911 from an office building that uses PBX telephones, for example, the call could be routed to the wrong jurisdiction, a wrong or misleading telephone number could be sent to the 911 system, and a wrong location could be sent. Response could be delayed if you don't know your location, and a delayed response could jeopardize your life and property.

Several years ago the public safety community petitioned the FCC to solve the 911 response location problems caused by both PBX and wireless telephones. The FCC opened docket 94-102 and eventually issued rules leading to enhanced 911 service for cell phones. They also sponsored ex parte discussions among the FCC staff and representative of the PBX providers, PBX users, and public safety associations. Consensus among these groups led to general guidelines designed to improve location capabilities when 911 is dialed but without causing undue burden or expense to the PBX operator. Further consensus work produced model legislation for states to consider.

State statute should regulate the owners and operators of PBX systems that are used in private businesses, hotels, residential units, and educational institutions, including schools and colleges. Each has different requirements, so effective dates should depend upon the user. The following is a general overview of the possible provisions to be implemented by state statute:

User Education

Each PBX operator must demonstrate or otherwise inform each new telephone system user how to call for emergency assistance from that particular multi-line telephone system. The provision will begin to assure that every Utahan who goes to work or school will receive the information that they need to know how to dial 911 from their location.

Existing Shared Residential PBX

Operators of shared PBX systems, whenever purchased and installed, serving residential customers must ensure that the shared PBX system is connected to the public switched network and that 911 calls from the system result in at least one distinctive automatic number identification and automatic location identification for each residential unit.

New Business PBX

Every owner and operator of a new PBX system purchased after a particular date, must design and maintain the system to provide a call back number and emergency response location. This provision will begin to assure that businesses will provide adequate call back number and location information when 911 is dialed from the new PBX system.

New Education Institution PBX

Effective on a particular date, the operator of a new education institution PBX system connected to the public switched network must ensure that calls to 911 from any telephone on the system result in one of the following:

(1) Automatic location identification for each respective emergency response location;

(2) Ability to direct emergency responders to the 911 caller's location through an alternative and adequate means, such as the establishment of a 24-hour private answering point; or

(3) A connection to a switchboard operator, attendant, or other designated on-site individual.

New Hotel and Motel PBX

Effective on a particular date, operators of hotel and motel multi-line telephone systems must permit the dialing of 911 and shall ensure that 911 calls originating from hotel or motel multi-line telephone systems allow the 911 system to clearly identify the address and specific location of the 911 caller.

Exemptions

Multi-line telephone systems with a single emergency response location are exempt from these requirements. A single emergency response location is defined in the law as a location to which a 911 emergency response team may be dispatched. The location must be specific enough to provide a reasonable opportunity for the emergency response team to locate a caller anywhere within it. For business PBX operators, only one emergency response location is required in the following circumstances:

(1) An employer's workspace is less than 40,000 square feet, located on a single floor and on a single contiguous property;

(2) An employer's workspace is less than 7,000 square feet, located on multiple floors and on a single contiguous property; or

(3) An employer's workspace is a single public entrance, single floor facility on a single contiguous property.

Multi-line telephone system operators that employ alternative methods of enhanced 911 support are exempt from these provisions.

A multi-line telephone system operator may apply for an exemption from the requirements in this section from the chief officer of each public safety answering point serving that jurisdiction.